

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully requested. Claims 1-10 are pending in the present application, with claims 1, 7, and 10 being independent. Claims 7-10 have been added by this amendment, which Applicant respectfully submits do not add any new subject matter.

Information Disclosure Statement

An Information Disclosure Statement and accompanying PTO-1449 Form were filed on November 19, 2001. There is presently no indication that the Examiner considered the documents identified in that Information Disclosure Statement. Accordingly, the Examiner is respectfully requested to acknowledge consideration of the documents in that Information Disclosure Statement by initialing the accompanying PTO-1449 Form and returning a copy of the initialed form to the undersigned.

Drawings

The Examiner objected to Figs. 6 and 7 stating that they should be designated by a legend. Applicant submits herewith a Drawing Correction Authorization Request, labeling Figs. 6 and 7 as "Conventional Art." Applicant notes that Fig. 7, as filed, contains the label "Prior Art". Accordingly, Applicant respectfully requests that the Examiner withdraw the objection. Subject to the Examiner's authorization, formal drawings will be provided upon allowance of the subject application.

Claim Rejections Under 35 U.S.C. §112

The Examiner rejected claims 1-6 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Each of the informalities identified in the outstanding Office Action have been addressed by this amendment. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection.

Claim Rejections Under 35 U.S.C. §102

The Examiner rejected claims 1-3 and 5 under 35 U.S.C. §102(e) as being anticipated by Applicant's admitted prior art. This rejection is respectfully traversed insofar as it pertains to the presently pending claims.

In rejecting independent claim 1, the Examiner alleges that page 17, lines 10-19, of Applicant's specification and Fig. 6 anticipate claim 1. Applicant would like to direct the Examiner's attention to MPEP 2129, which states that only "when applicant states that something was prior art, it is taken as being available as prior art against the claims." Applicant would like to direct the Examiner's attention to page 17 of the present application, which is one of the pages of the detailed description. Page 17 of the present application merely teaches that Fig. 2 contains three types of map units, which are the same as shown in Fig. 6 (the conventional art), namely, a route link map unit, an adjacent route map unit and a non-linked map unit. In other words, Figs. 2 and 6 have the same description labels. As such, Fig. 6 does not teach or suggest the combination or elements as recited in claim

1. Therefore, because the Examiner utilizes Applicant's own description in rejecting independent claim 1, Applicant respectfully submits that the Examiner's anticipation rejection constitutes legal error.

Furthermore, referring to page 5, lines 12-17 of the present application, it is taught that in the prior art:

...in cases where a length of a route from a current position of a vehicle to a destination is extremely long...it is impossible to write road map data of all route link map units and all adjacent map units relating to the extremely long route in the data buffer [because a storage capacity of the data buffer is limited].

As such, one skilled in the art would appreciate that the cited prior art fails to teach or suggest at least that: (1) an area of a first map is set, which corresponds to a first part of the route associated with a first type of road, to a first range in a pre-reading process; (2) an area of a second map is set, which corresponds to a second part of the route associated with a second type of road, to a second range in the pre-reading process; and (3) map data size of the second range of the area is less than the first range of the area, as recited in claim 1.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection.

Claim Rejections Under 35 U.S.C. §103

The Examiner rejected claim 4 under 35 U.S.C. §103(a) as being unpatentable over Applicant's prior art in view of *Okano* et al. (US Patent No. 6,311,125); and claim 6 under 35 U.S.C. §103(a) as being unpatentable over Applicant's prior art in view of *Ihara* et al. (US Patent No. 6,336,073). These rejections are respectfully traversed.

Claims 4 and 6 are dependent claims, which Applicant respectfully submits should

be considered allowable at least for depending from an allowable base claim.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections.

Lastly, added claims 7-10 should be considered allowable at least because the cited prior art fails to teach or suggest the combination of elements including: that the driving route is divided into ranges, whereby each range receives an attribute depending on a classification of a road type within the range, and that the amount of map data, stored in the data buffer, is dependent on the attribute associated with each range of the driving route.

Conclusion

In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

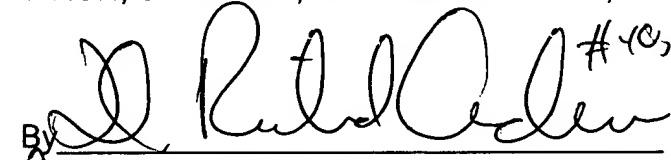
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at telephone number (703) 205-8000, which is located in the Washington, DC area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Application No. 09/988,318

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made
Copy of PTO-1449 Form dated November 19, 2001
Drawing Correction Authorization Request

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

The claims have been amended as follows:

1. (Once Amended) A navigation device for a vehicle comprising:

map data providing means for reading map data from a recording medium;

pre-reading process means for receiving a destination, detecting a current position of [a] the vehicle, determining a route from the current position of the vehicle to the destination according to the map data provided from the map data providing means, setting an area of a first map, which corresponds [corresponding] to a first part of the route [placed in] associated with a first type of road₁ to a first range in a pre-reading process and setting an area of a second map, which corresponds [corresponding] to a second part of the route [placed in] associated with a second type of road₁ to a second range in the pre-reading process [on condition] such that map data size of the second range of the area [of the second map] is [narrower] less than the first range of the area [of the second map];

data storing means for storing both first map data, which corresponds to the first map area set by the pre-reading process means and is provided from the map data providing means, and second map data, which corresponds to the second map area set by the pre-reading process means and is provided from the map data providing means, in the pre-reading process; and

guiding means for guiding the vehicle to take the route to the destination according to both the first map and the second map which are indicated by both the first map data

and the second map data stored in the data storing means.

2. (Once Amended) [A] The navigation device [for vehicle] according to claim 1, wherein the pre-reading process means further comprises:

road attribute checking means for:

receiving the map data of a map area, which is partitioned into a plurality of map units and includes both the first type of road, to which a road attribute indicating the first type of road is attached, and the second type of road to which a road attribute indicating the second type of road is attached, from the map data providing means,

partitioning the route placed on both the first type of road and the second type of road into a plurality of route links, respectively included in one of the map units, so as to attach the road attribute indicating the first type of road or the road attribute indicating the second type of road to each route link,

checking whether the road attribute attached to each route link indicates the first type of road or the second type of road,

specifying a first remarked map unit including each first remarked route link and one or a plurality of map units placed near to the first remarked map unit in cases where the road attribute attached to the first remarked route link indicates the first type of road,

specifying a second remarked map unit including each second remarked route link in cases where the road attribute attached to the second remarked route link indicates the second type of road,

controlling the data storing means to store data of the first remarked map units and data of the map units placed near to the first remarked map units as the first map data₁ and

controlling the data storing means to store data of the second remarked map units and data of the map units placed near to the second remarked map units as the second map data.

3. (Once Amended) The [A] navigation device [for vehicle] according to claim 2, wherein the first type of road denotes a general road other than a throughway, and the second type of road denotes a throughway.

4. (Once Amended) The [A] navigation device [for vehicle] according to claim 3, wherein one or a plurality of map units₁ placed near [to] one second remarked map unit₁ are specified by the road attribute checking means [in cases where] when a junction exists in the second remarked map unit, and the data storing means is controlled by the road attribute checking means to additionally store data of the map units placed near [to] the second remarked map unit as the second map data.

5. (Once Amended) The [A] navigation device [for vehicle] according to claim 2, wherein a second pre-reading process is performed by the road attribute checking means to specify one or a plurality of additional map units placed near [to] the map units₁ which are placed near [to] the first remarked map unit or the second remarked map unit, and the data storing means₁ is controlled by the road attribute checking means to additionally store data of the additional map units.

6. (Once Amended) The [A] navigation device [for vehicle] according to claim 1, wherein the process means and the data storing means.

Claims 7-10 have been added by this amendment.